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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,208

07/15/2003

Jose Agerico R. Moncada

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1085

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10/05/2004

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EXAMINER

POKER, JENNIFER A

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,208

Applicant(s)

MONCADA ET AL.

Examiner

Jennifer A. Poker

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

General Status

1. This is a second action on the merits of amendment received July 22, 2004 of application filed July 15, 2003. Claims 1-3, 5-9, 11, and 12 are pending and are being examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent Number 6,075,430 to Lindqvist.

Regarding claim 1, Lindqvist discloses an inductive component comprising:

- (1) magnetic core (1) having an elongated cylinder (2);
- (2) two flanges (3, 4), one located at each outer end (8, 9) of the elongated cylinder (2) defining a planar surface;
- (3) a coil (6) wound around the center part of the cylinder (2) between the flanges (3, 4).

It can be seen in figures 1b-1d and figure 2b that the winding defines a planar surface, which is coplanar with each of the flanges located at the ends of the cylinder.

Regarding claim 7, Lindqvist discloses an inductive device, which enables flexible and inexpensive transformers and inductors to be constructed with the aid of available winding techniques (column 1, lines 39-40); the inductive device comprising:

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- (1) two (first and second) magnetic cores both having an elongated central cylinder;
- (2) two flanges on each core; one flange located at each other end of the cylinder; the flanges defining a planar surface;
- (3) a coil wound around the center part of each cylinder, between the flanges;
- (4) a yoke (10) securing the cores together such that the planar surface flanges of one core is coplanar with the planar surface flanges of the second core (figures 2a-2c).

Lindqvist discloses the claimed invention except for the specific rectangular cross-sectional shape. It would have been obvious to one having ordinary skill in the art to utilize a suitable shape of elongated core in order to optimize results, since applicant has not disclosed that the specific rectangular cross-sectional shape solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any shape cross section such as the shape disclosed by Lindqvist. Furthermore, Lindqvist discloses in the background of the invention that it had been known in the art that magnetic cores have been made by compressing coiled strips into rectangular shapes.

4. Claims 2, 3, 6, 8, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,075,430 to Lindqvist in view of U.S. Patent Number 6,512,175 to Gutierrez.

Regarding claims 2, 3, 6, 8, and 9, Lindqvist discloses the claimed invention except for a mounting frame used to surround a core or cores; secure wire ends; and enables the core/cores to be surfaced mounted on an adjacent structure.

Gutierrez discloses electrical and electronic elements used in printed circuit board applications comprising an electronic packaging device comprising at least one core having a winding located within a non-conducting base member having; the base member having a plurality

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of lead channels and lead terminals formed therein. The wire leads of the winding are routed through the lead channels and connected to the lead terminals. A plurality of lead terminals, adapted to cooperate with the lead channels, are received within the lead channels, thereby forming an electrical connection between the lead terminals and the wire leads of the electronic component. (Abstract; figure 9; column 5, lines 6-8)

One skilled in the art, at the time the invention was made, would have found it obvious to combine the teachings of Lindqvist with the teachings of Gutierrez and incorporate a base/mounting body with terminals about any core structure for the purposes of electrically connecting the windings and the device to a substrate such as a printed circuit board.

Lindqvist in view of Gutierrez disclose the claimed invention except for stating that the structure is constructed to enhance heat transfer. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Lindqvist in view of Gutierrez discloses the claimed structural limitations so it is understood that that structure would be capable of performing the function as claimed by applicant.

Claims 11 and 12 are the method counterpart to product claims 1, 2, and 7, and method steps are therefore inherent for manufacturing an inductive element have an elongated core or elongated cores as claimed by the inventor.

Response to Arguments

5. Applicant's arguments filed July 22, 2004, have been fully considered but they are not persuasive.

Applicant has amended claims 1 and 7 by incorporating the limitations from cancelled claims 7 and 10. Regarding applicant's argument that the end portions in the Lindqvist reference are not coplanar with the outer planar surface of the winding. Nor does the winding define a planar surface. Examiner disagrees. It is clearly seen in the illustrations that the winding defines a planar surface. Furthermore, Lindqvist states in column 1, lines 56-65, that the magnet core 1 is comprised of THREE strips of ferromagnetic, amorphous material. A wide strip is first wound around non-magnetic material 5 such as to produce a cylinder 2 that has planar outer ends 8, 9. Two narrower strips are then wound edge-to-edge with the outer ends 8, 9, to provide two flanges 3, 4. The core end portions are made of BOTH the outer ends and flanges. The flanges/ends are clearly planar surfaces. The elongated center is clearly a planar surface. And, as clearly shown in the drawings, once the central elongated portion had the wound about it, the outer surface defined a planar surface, which is coplanar with the ends/flanges.

In response to applicant's argument that the core of the Lindqvist reference is not of elongated rectangular shape, examiner maintains that applicant has not disclosed that the specific rectangular cross-sectional shape solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any shape cross section such as the shape disclosed by Lindqvist. Examiner believes, based on applicant's disclosure, that the elongated "rectangular" shape does not alter the functionality of the inductive element. Furthermore, Lindqvist discloses in the background of the invention that it had been known in the art that magnetic cores have been made by compressing coiled strips into rectangular shapes.

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In response to applicant's argument, relating to claim 2, that neither Lindqvist or Gutierrez disclose a structure that enhances heat transfer, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Applicant further states that the arguments presented with respect to claim 1 are also applicable to claim 2. Examiner's response to arguments for claim 1 are therefore applicable to claim 2.

Claims 3-6 are dependent on claim 1. No further arguments relating specifically to claims 3-6 were found. Therefore, previous art rejection is maintained. See above.

Claims 8 and 9 are dependent on claim 7. No further arguments relating specifically to claims 8 and 9 were found. Therefore, previous art rejection is maintained. See above.

Claim 11 had been amended to include similar limitations as claim 1. Applicant states that the arguments presented with respect to claim 1 are applicable to claim 11. Examiner's response to arguments for claim 1 are therefore applicable to claim 11.

Claim 12 is dependent on claim 11. No further arguments relating specifically to claim 12 were found. Therefore, previous art rejection is maintained. See above.

Further arguments are addressed below:

- (1) Objections to the drawings are withdrawn;
- (2) Objections to the specification are withdrawn;
- (3) Claim rejections under 35 U.S.C. 112, first paragraph, are withdrawn.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 571-272-1997. The examiner can normally be reached on 4:30-3:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jap
September 30, 2004

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